

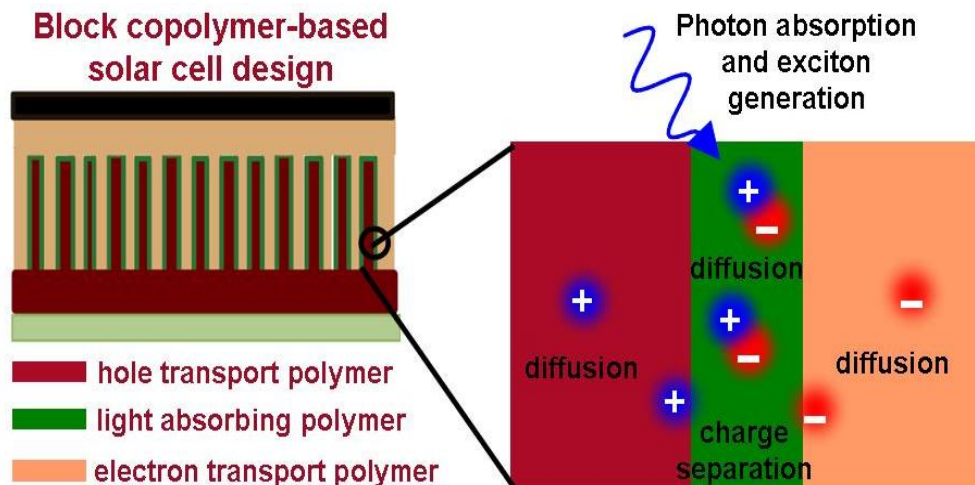


U.S. DEPARTMENT OF  
**ENERGY**

# Polymer-Based Materials for Harvesting Solar Energy

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**Summary statement:** Maximize the collection and conversion efficiency of a broad frequency range of the solar spectrum using the guided self-assembly of polymer-based materials so as to optimize the design and fabrication of inexpensive devices.



## RESEARCH PLAN AND DIRECTIONS

Organic-based devices, while relatively inexpensive and easy to fabricate, have low efficiencies. They are also plagued by low long-term stability problems. We face the challenge of producing affordable, efficient and robust photovoltaic devices.



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